

Amendments to the Specification

IN THE ABSTRACT OF THE DISCLOSURE ✓

Attached hereto is a replacement Abstract.

IN THE WRITTEN DESCRIPTION

Please replace the paragraph beginning at page 11, line 4, with the following rewritten paragraph:

C2

The imaging section includes illuminating means, photosensitive detector means, means for representing the intensity of the detected light by a data array, data processing means for segmenting the data and comparing the segmented data and output means. The illuminating means is provided by three light emitting devices (LEDs) 44 which are mounted in a horizontal line parallel to the longitudinal length of the test cartridge 10 with the middle LED centred vertically above the centre of window 22 of the test cartridge 10. The photosensitive detector means and means for representing the intensity of the detected light by a data array are provided by a CCD 34 which includes an imager 82, a video digitiser 84 and a video data interface 86 (shown on Figure 5). Alternatively, the photosensitive detector means may be made up from a CCD array device together with a control and data conversion interface. The imager of the CCD 34 is directed towards the rear of the screening device 30. A mounting plate 46 is attached to the upper body of the CCD 34 towards the front of the screening device 30. The mounting plate 46 extends horizontally from the body of the CCD 34 towards the rear of the screening device 30 and finishes directly above the window 22 of the test cartridge 10. Three LEDs 44 are attached in a row at the front of the underside of the mounting plate 46. When illuminated, the light from the LEDs 44 shines directly onto the window 22 of the test cartridge 10. The mirror 40 is inclined from the vertical by approximately 35° such that the window 22 of the test

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cont

cartridge is reflected into the field of view of the CCD 34. Light reflected from the immunoassay test is detected by an array of photosensitive detectors in the imager 82. The photosensitive detectors emit an electrical signal proportional to the intensity, the concentration, of light detected. The video digitiser 84 scans each of the photosensitive detectors in turn, converting the analogue data to digital data and storing the data in an array. The array of digital data is subsequently outputted to a central processor unit (CPU) 80 via the video data interface 86.

Please replace the paragraph beginning at page 26, line 1, with the following rewritten paragraph:

C3

The control band may only be used to verify that the test has run successfully and may not be used for the quantification of individual drug concentration calculations. In this case, null data, reference data, may be provided in order to quantify the test results. Such null data may, for example, correspond to the data which would be generated by illuminating a blank immunoassay test strip under identical conditions to the illumination of the experimental immunoassay test strip. Such null data would then give an estimate of the intensity observed when the concentration of a drug in the sample under test approximates or exceeds the amount of conjugated antibodies released from the relevant pad. Such null data may be compared to the test data to determine the concentration of the substance in the sample under test.
